

ABSTRACT

The present invention provides for the use of water, rather than cumene, as a more environmentally acceptable diluent for purified cumene hydroperoxide (CHP) solutions. From 1 to about 5 weight percent water can be used to dilute purified CHP solutions, thus reducing or eliminating the use of a hazardous compound, cumene, as a diluent. The method and CHP-water solutions of the present invention should significantly reduce or eliminate the hazardous emissions problems encountered with the use of cumene as a diluent and make CHP solutions more environmentally acceptable to produce, transport and use. Water as a diluent also depresses the freezing point of the resultant solution, thereby 10 permitting year-round use of higher concentration CHP solutions. Water diluted CHP solutions will also reduce cumene-related impurities in finished products made therefrom.